

FIG. 1

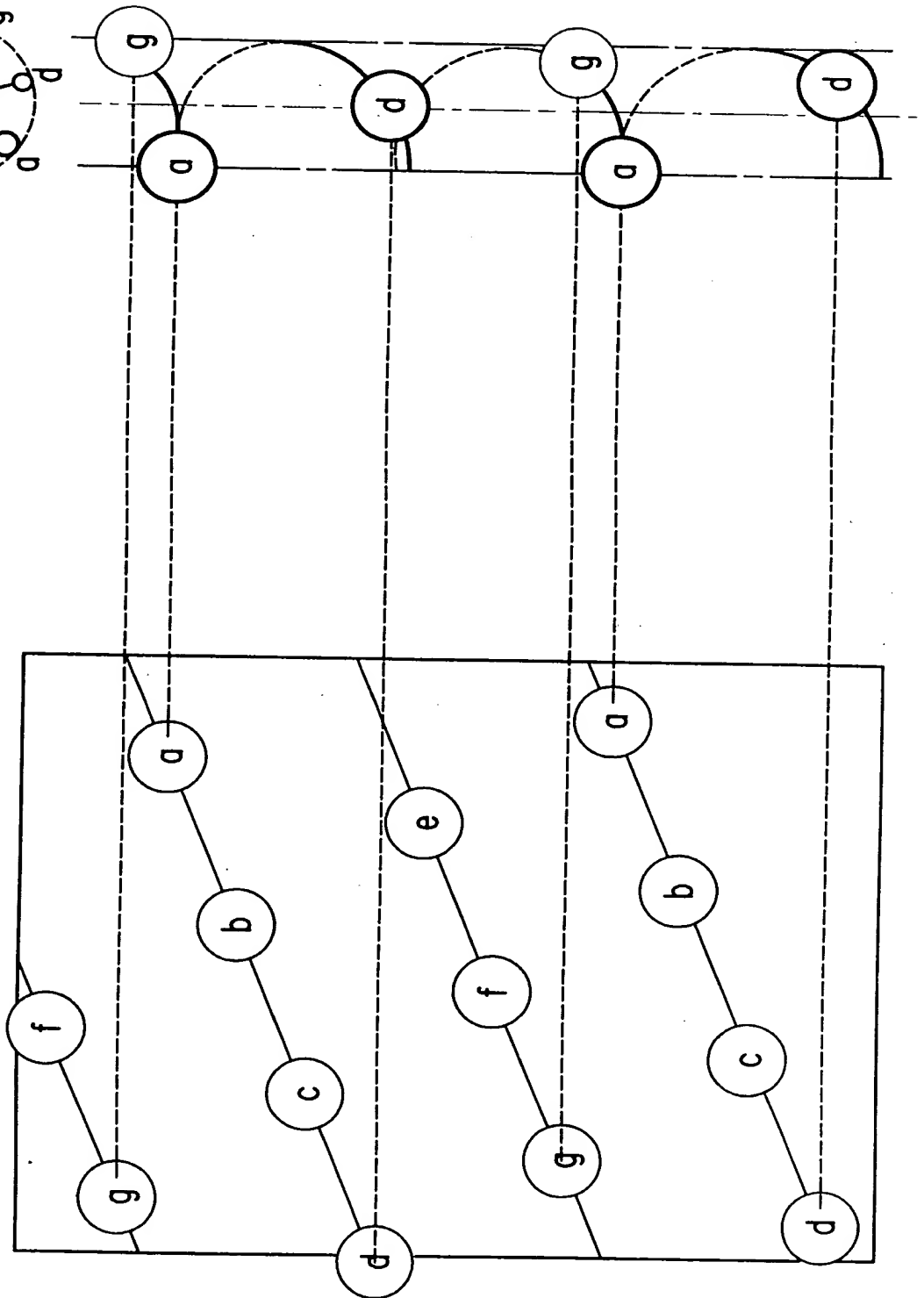


FIG.2A

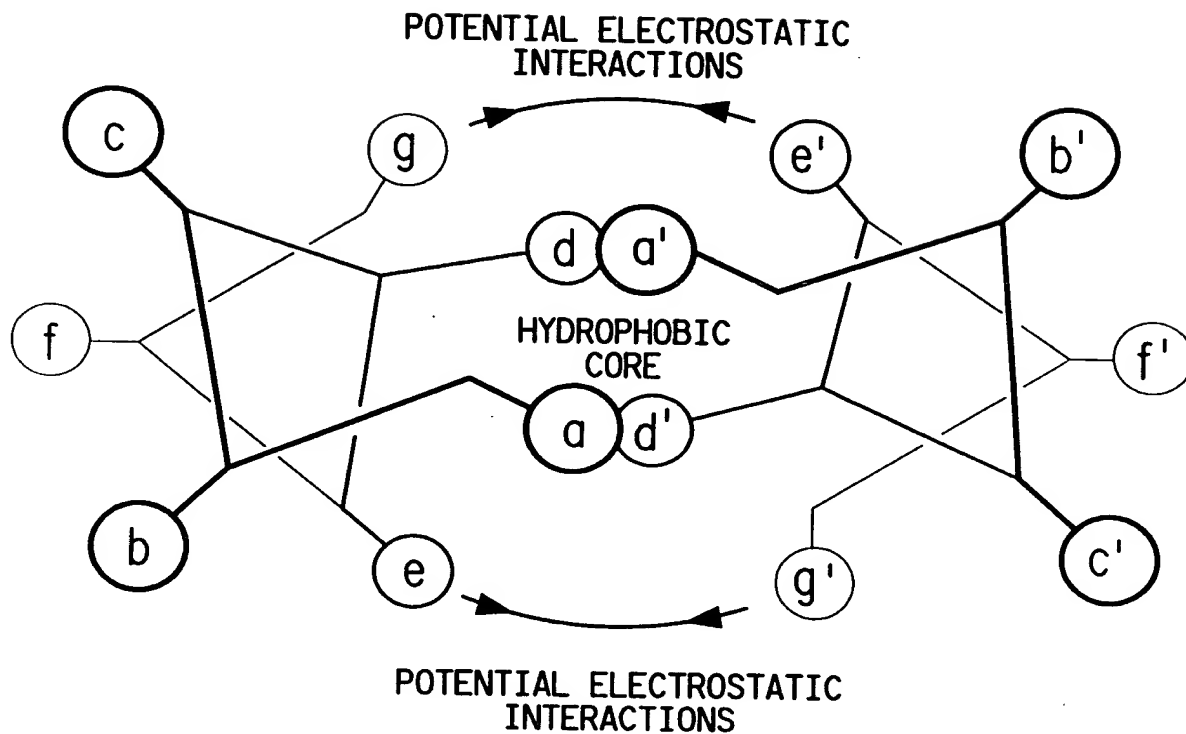


FIG.2B

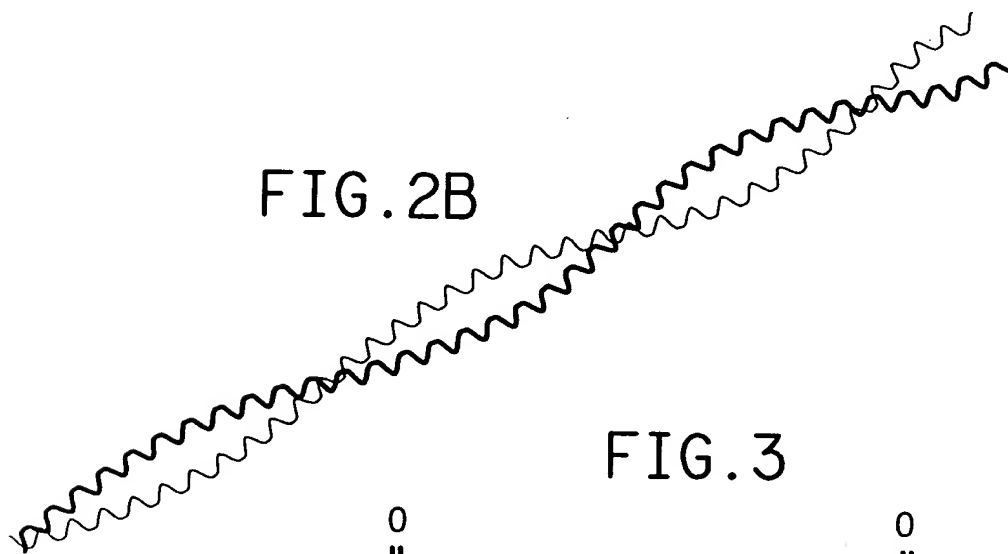
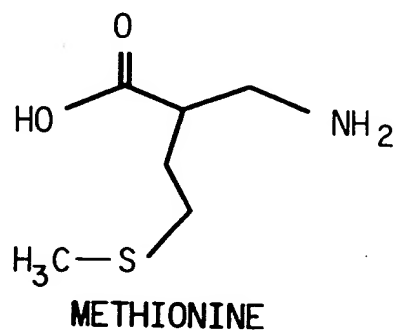
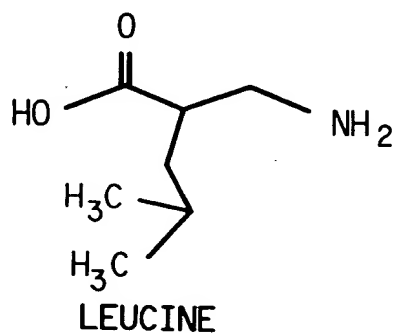


FIG.3



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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FIG. 4a

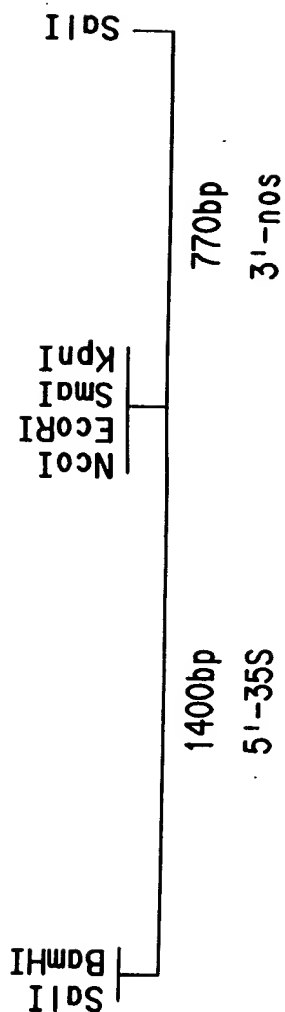
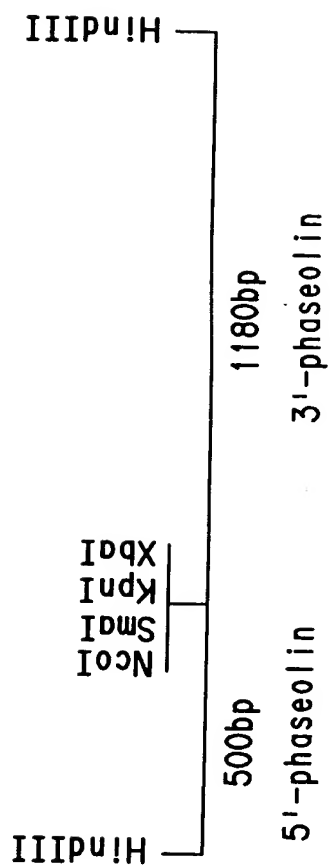
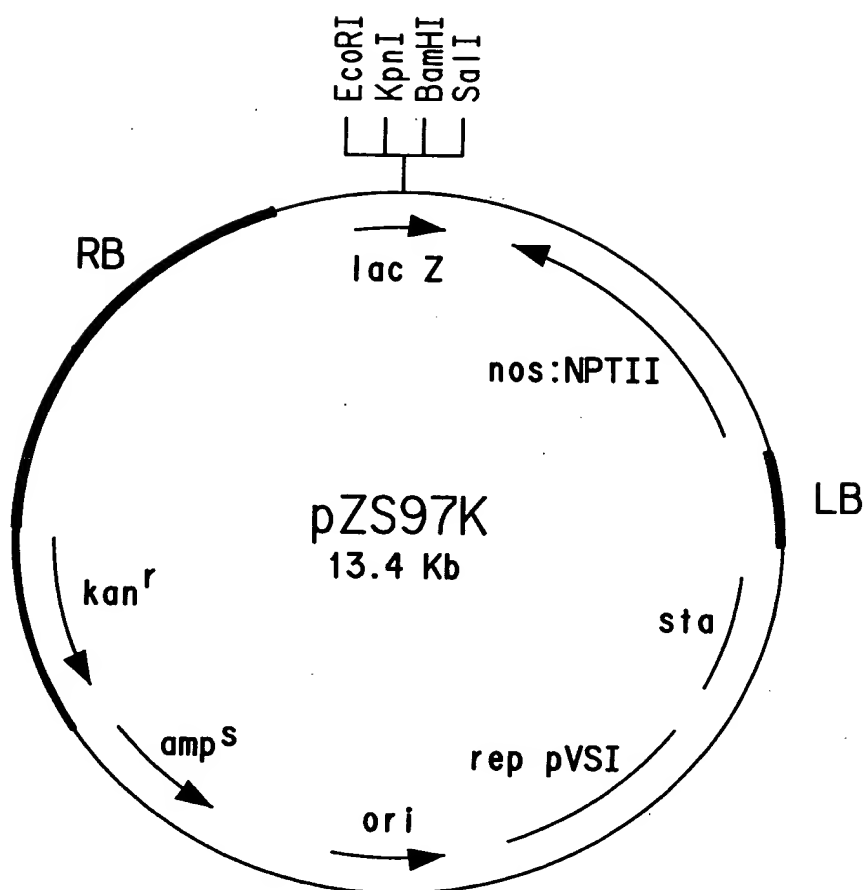


FIG. 4b



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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FIG.5



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

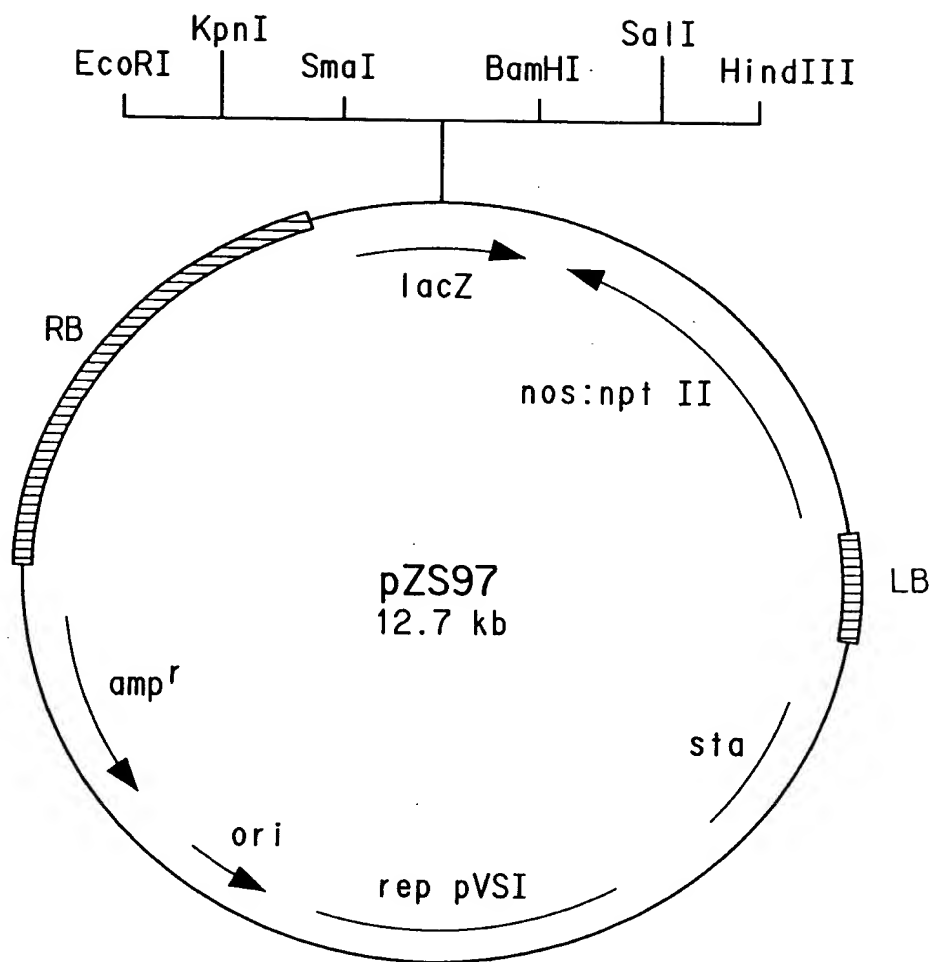


FIG.6

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

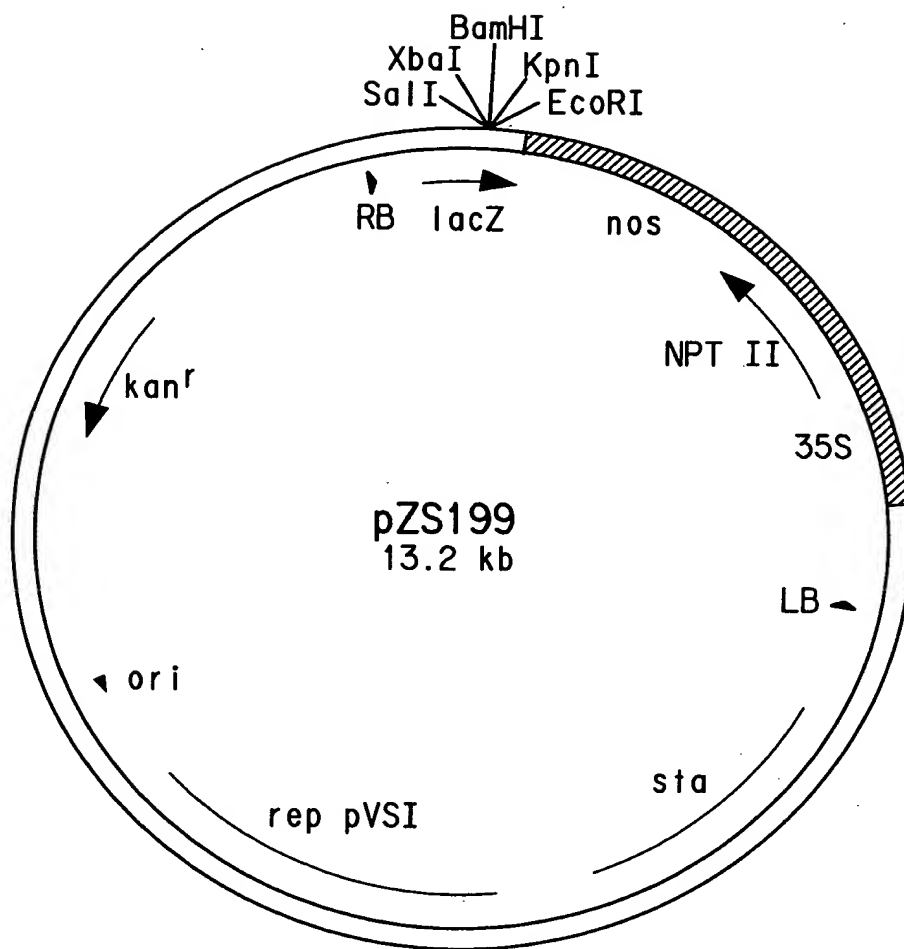


FIG. 7A

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

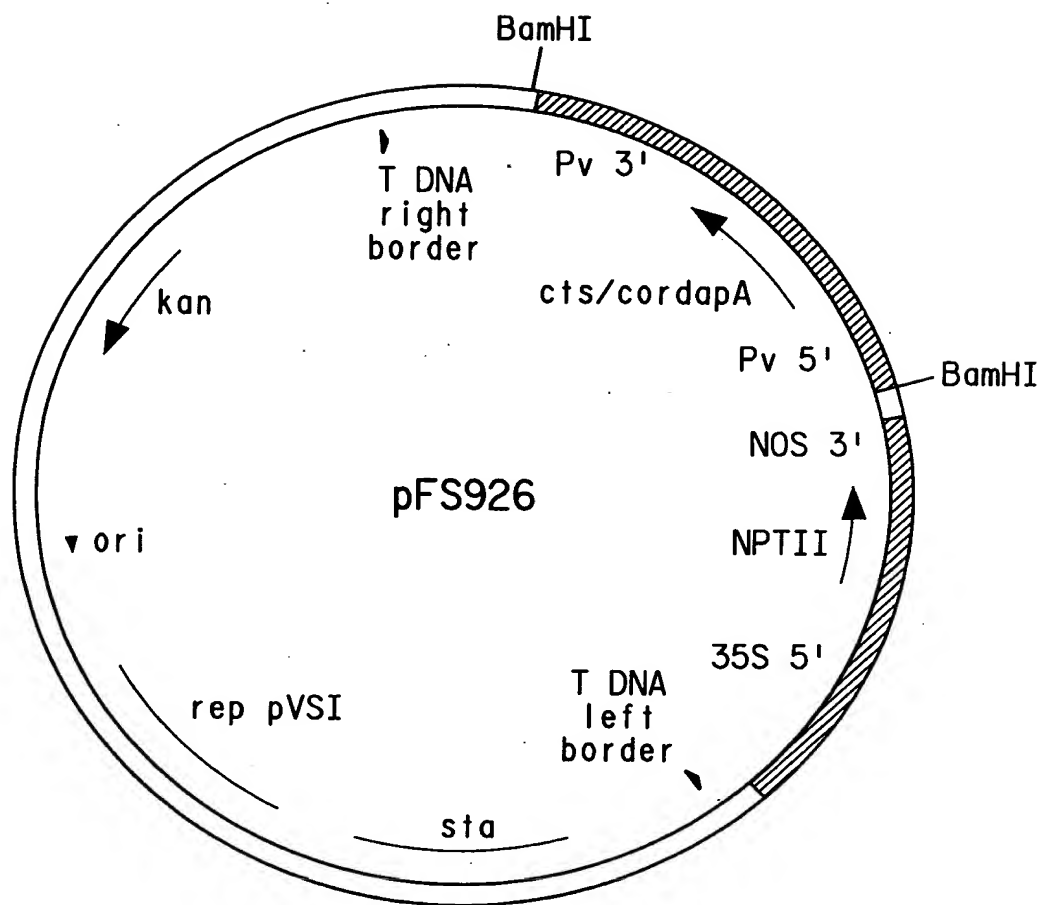


FIG. 7B

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

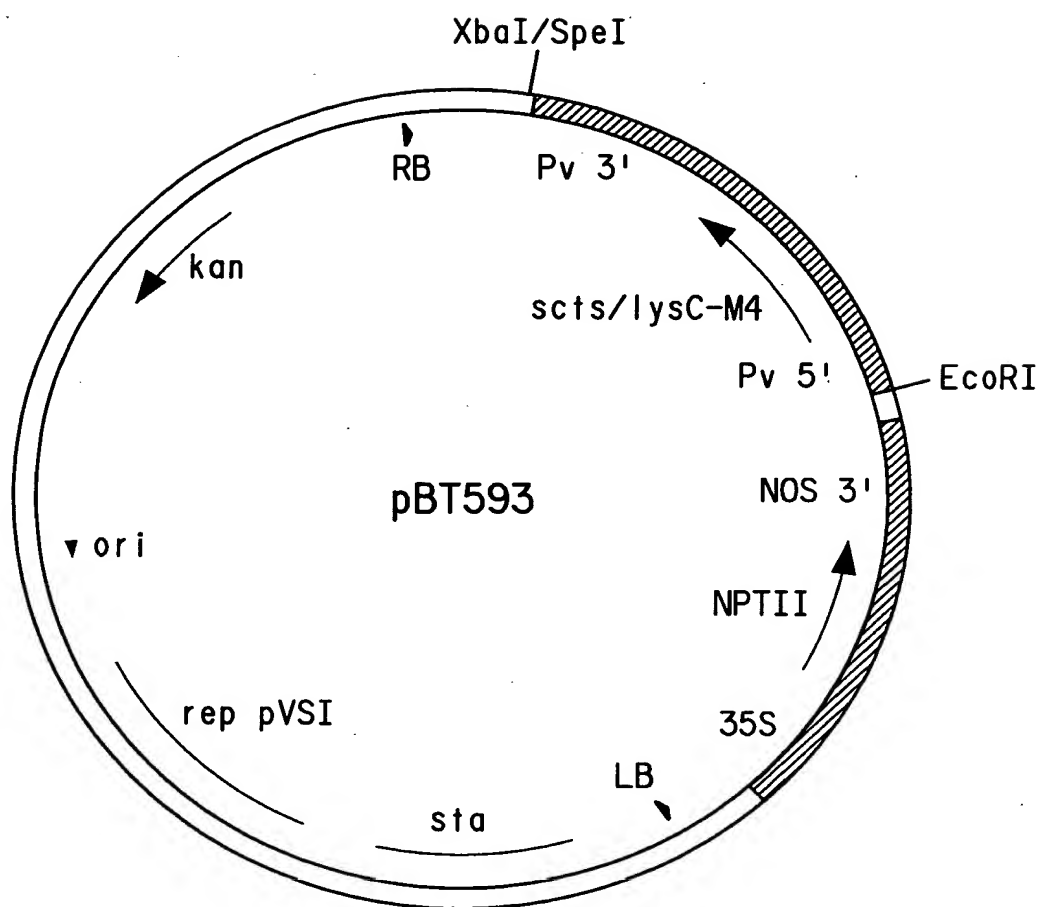


FIG. 7C

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

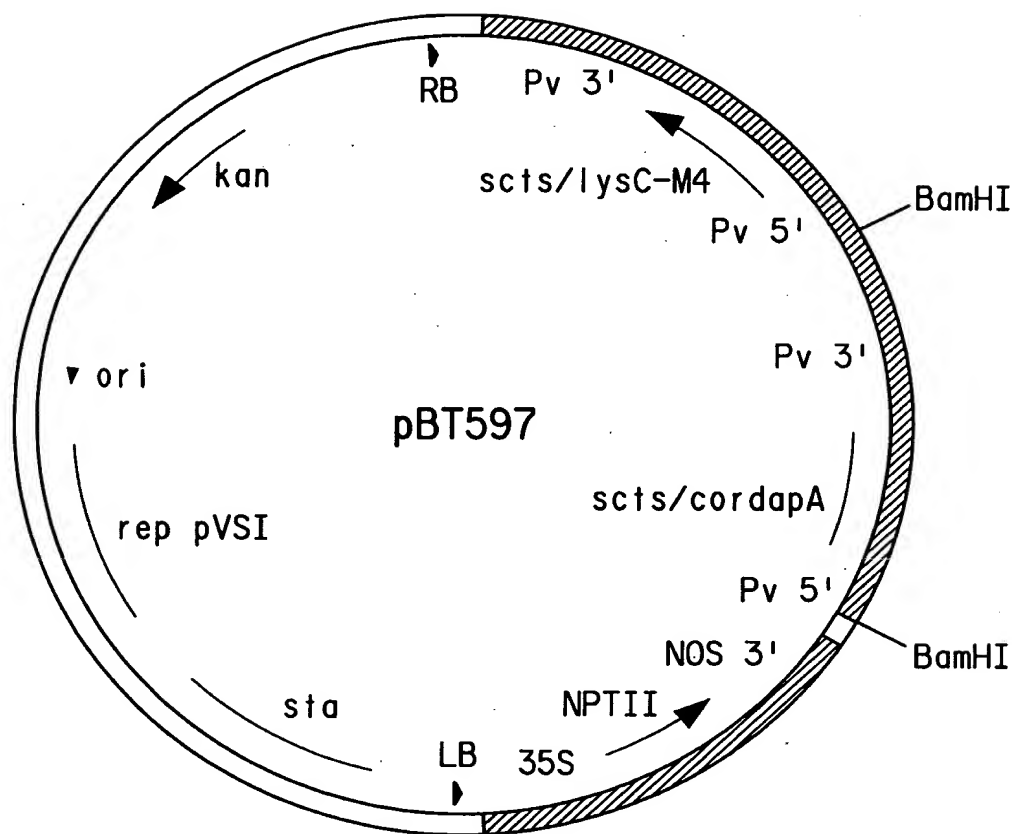


FIG. 7D

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

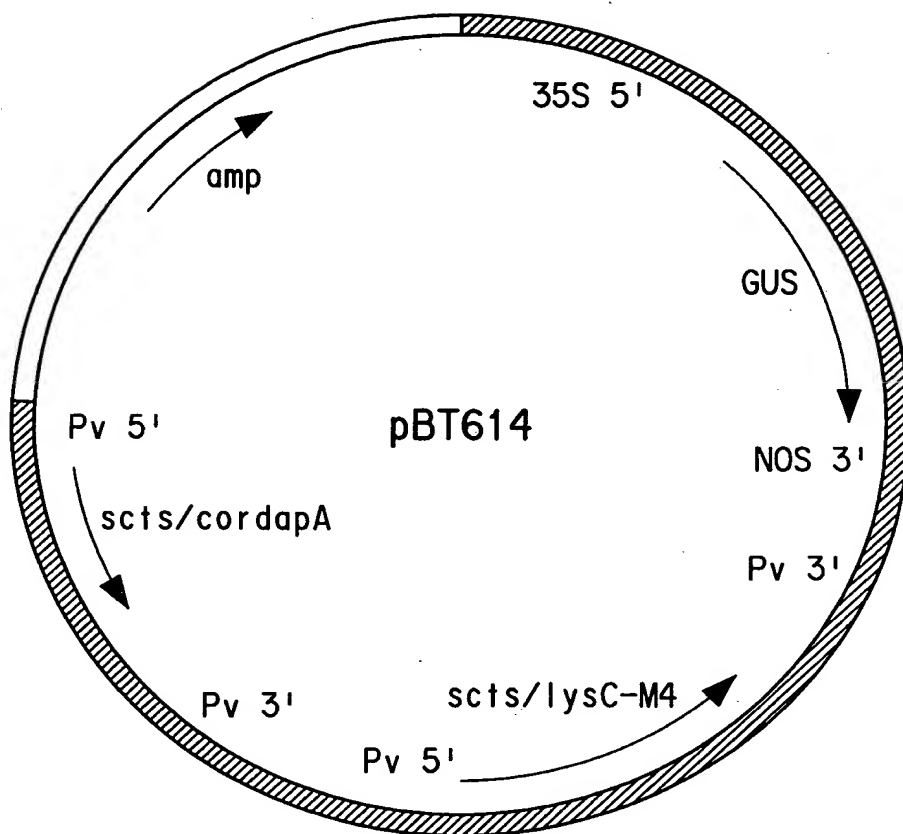


FIG. 8B

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

FIG. 9

SEQ ID NO:104

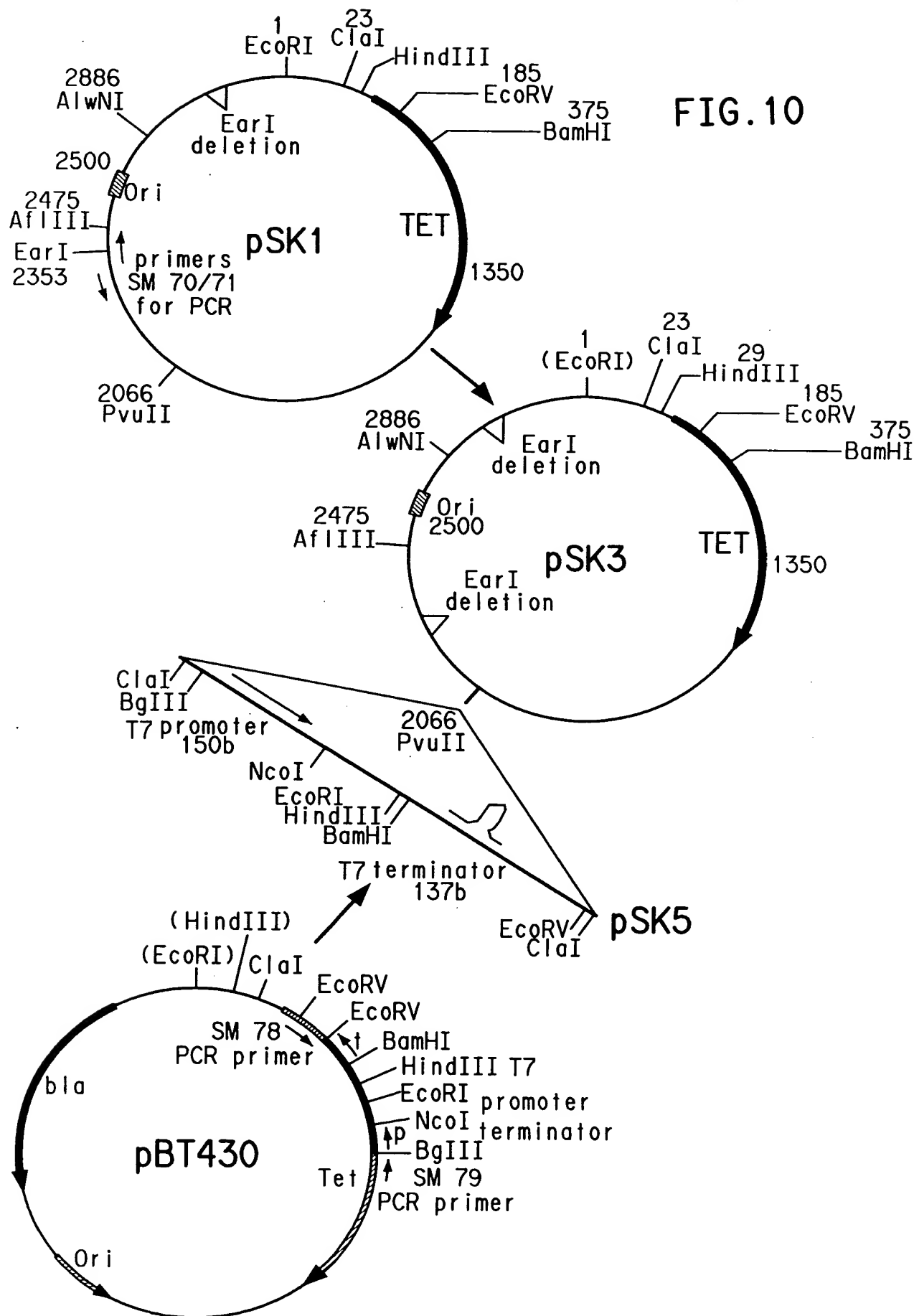
S. cerevisiae SDH

19 K K S G V L I L G A G R V X R P A A D E L A S V R T I S S Q Q W Y K T Y F G A D S E E K T D V H V I 68
 . . . | | | | | . | . | | | .
 1 M G N V L L L G S G F V A Q P V I D T L A A N D D I N V T 30
 69 V A S L Y L K D A K E T V E G I S D V E A V R L D V S D S E S L K Y V S Q V D V L S L L P A S C 118
 | | : | : | : . . | : . | . | . | . | . | : : | | : | | : | .
 31 V A C R T L A N A . Q A L A K P S G S K A I S L D V T D D S A L D K V L A D N D V I S L I P Y T F 79
 119 H A 120
 | :
 80 H P 81

SEQ ID NO:105

S. cerevisiae SDH

1 K H T A T L L E F G D I K N G Q T T A M A K T V G I P A A I G A L L I E D K I K T R G V L R P L 50
 . : | . | | : : | : | | | . | | . | | : : : : . | | . | | .
 374 T R T S T L V D Y G K V . . G G Y S S M A A T V G Y P V A I A T K F V L D G T I K G P G L L A P Y 420
 51 E A E V Y L P A L D I L . Q A Y G I K I M E K A E 74
 . : | : | : . | : | | | | . | .
 421 S P E I N D P I M K E L K D K Y G I Y L K E K T V A 446

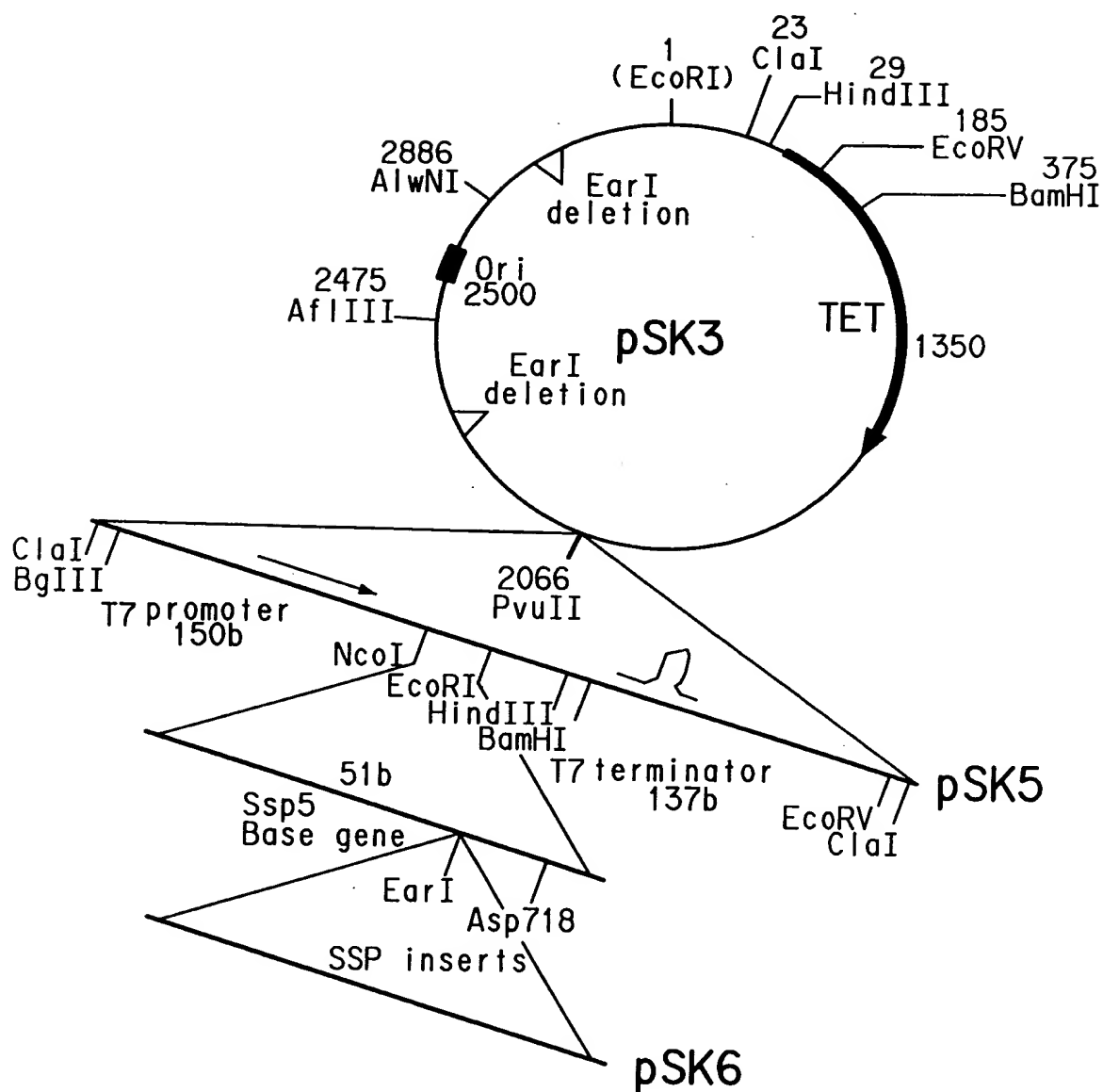


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NCOI
 CATGGAGGAGAAGATGAAGGC GATGGAAGAGAGAGATGAAGGCGTGATAGGTACCG
 CTCTCTTCTACT TCCGCTA CCTTCTC TTCGACTTCGCACTATCCATGGCTTAA
 M E E K M K A M E E K M K A
 ↓ LIGATE OLIGOS
 GATGGAGGAGAAGATGAAGGC
 CCTCTCTTCTACTTCCGCTA
 M E E K M K A
 ↓ LIGATE TO EARI CUT VECTOR
 NCOI
 CATGGAGGAGAAGATGAAGGC GATGGAGGAGAAGATGAAGGC GATGGAAGAGAGAGATGAAGGCGTGATAGGTACCG
 CTCTCTTCTACT TCCGCTA CCTCTCTTCTACTTCCGCTA CCTTCTC TTCGACTTCGCACTATCCATGGCTTAA
 M E E K M K A M E E K M K A

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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FIG. 12



	NCOI	EARI	BSPHI	STOP	ASP718	ECORI	BASE	GENE
	↓							
	CATGGAGGAGAAGATGAAAAA	GCTC	GAAGAG	AAGATGAAGGTCATGAAG	TCGAT	AGGTACCG		
	CTCCTCTTCTACTTTTTCTA	GCTTCTCTTCTACTTCCCAGTACTTCACTATCCATGGCTTAA						
		↑						
	M E E K M K K	L	E E K M K	V	M	K		

OLIGONUCLEOTIDE INSERTS

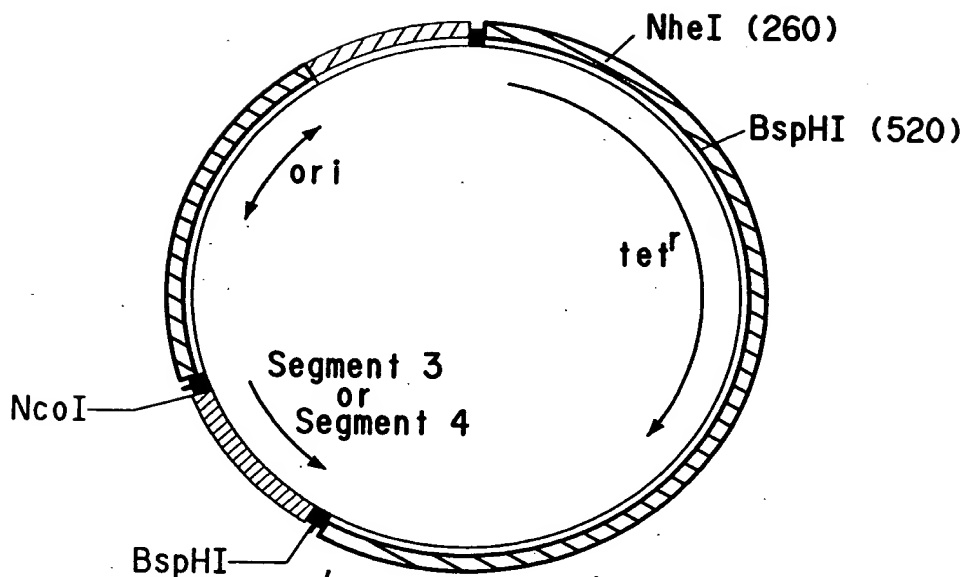
GGCTGGAAGAAAAGATGAAGGCTATGGAGGAGAAGATGAAATGGCTTGAGGAAAAGATGAAGAA
CCTTCTTTTCTACTTCCGATACCTCCTGTCTACTTTACCGAACTCCTTTTCTACTTCTTCTCGA
L E E K M K A M E E K M K W L E E K M K K

OLIGOS LIGATED INTO EARI CUT BASE GENE

NCOI
 CATGGAGGAGAAGATGAAAAA GCTGGAAGAAAAAGATGAAGGCTATGGAGGAGAAGATGAAATGGCTTGAGGAAAAGATGAAGAAGCT
 CTCCTCTCTACTTTTTCTA CCTTCTTTTCTACTTCCGATACCTCCTGTCTACTTTACCGAACTCCTTTTCTACTTCTTCGA
 MEKKMKKLEKKMKAMEEKKWLEEKMKKL

EARI BSPHI ASP718 ECORI
CGAAGAGGGAAGATGAAGGTCATGAGTCGATAGGTACCG
GCTTCTCTTCTACTTCCAGTACTTCACATCCATGGCTTAA CLONE pSK34
E E K M K V M K

FIG. 14a



Segment 3 Digest NheI/BspHI Segment 4 Digest NheI/NcoI

FIG. 14b

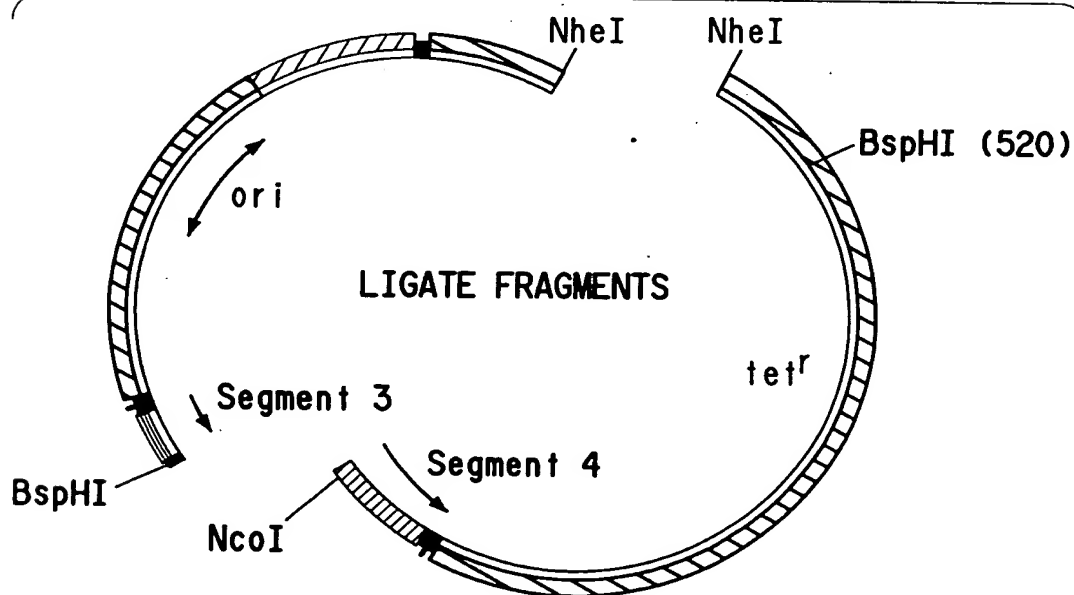
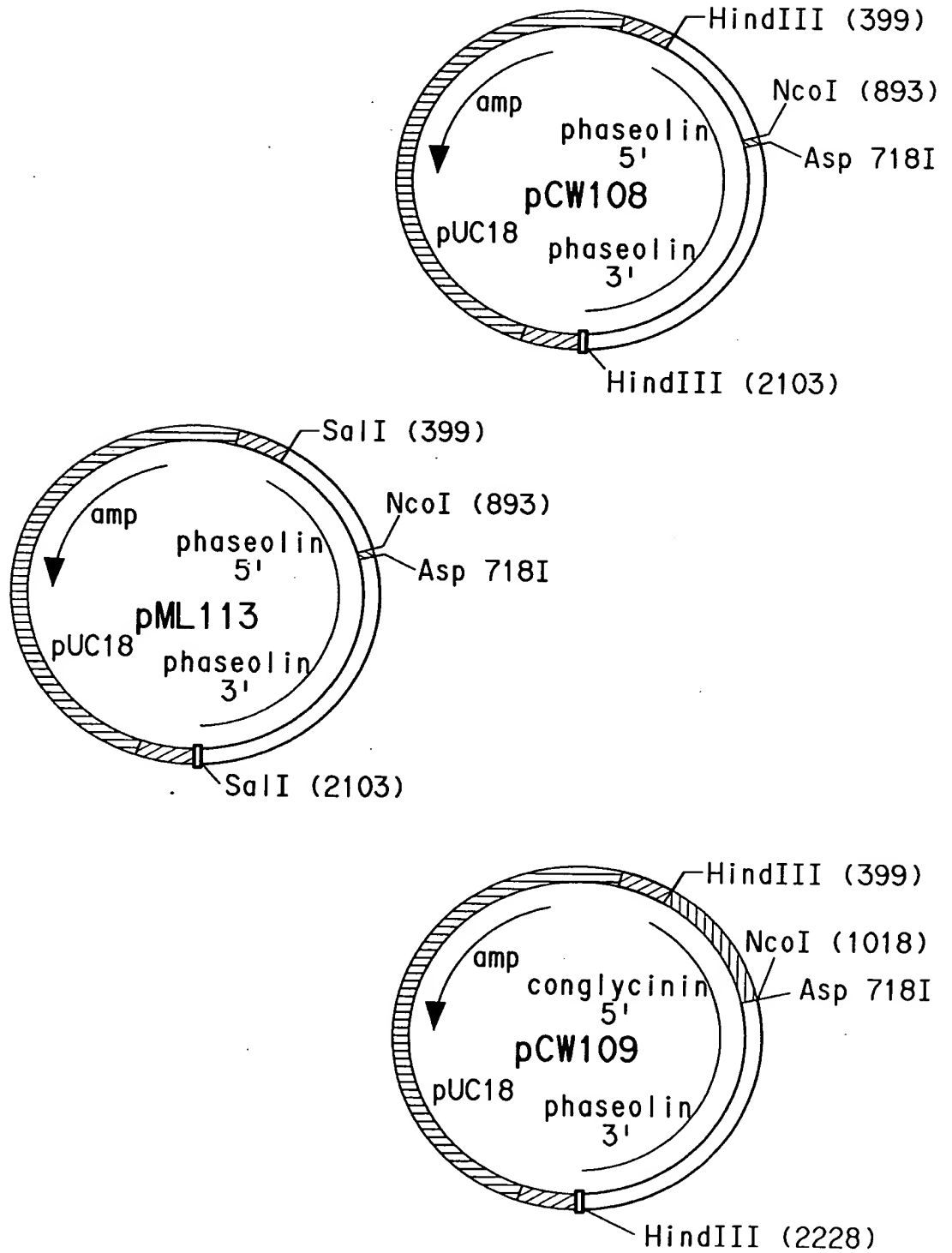


FIG. 15



443436

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

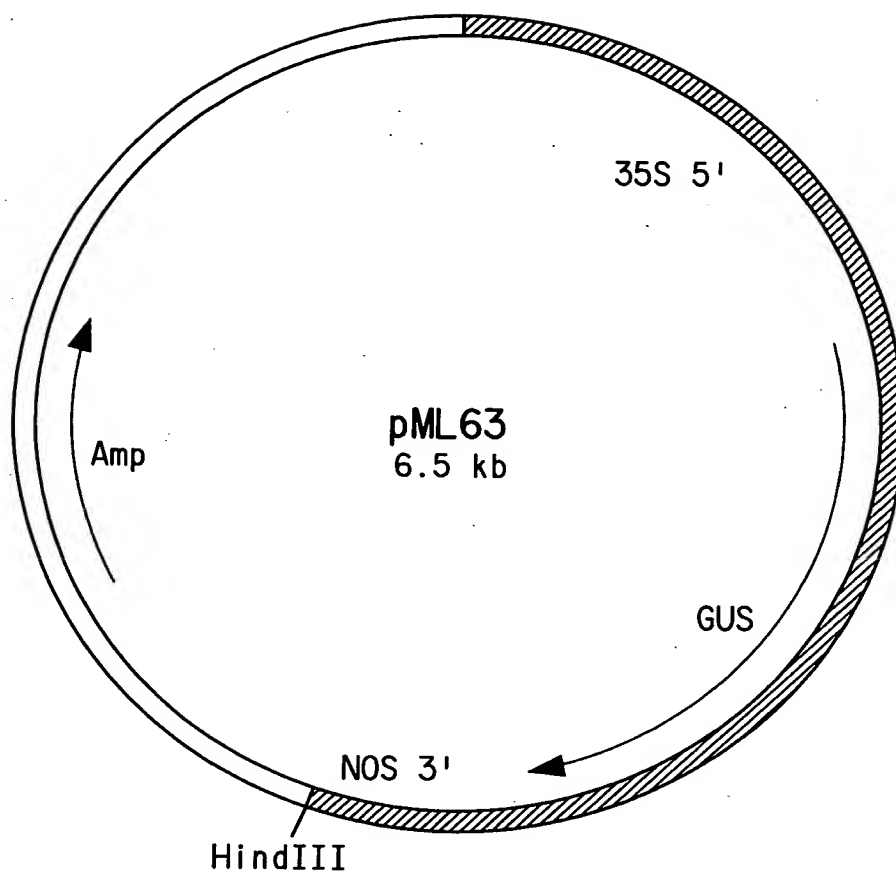


FIG. 16

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

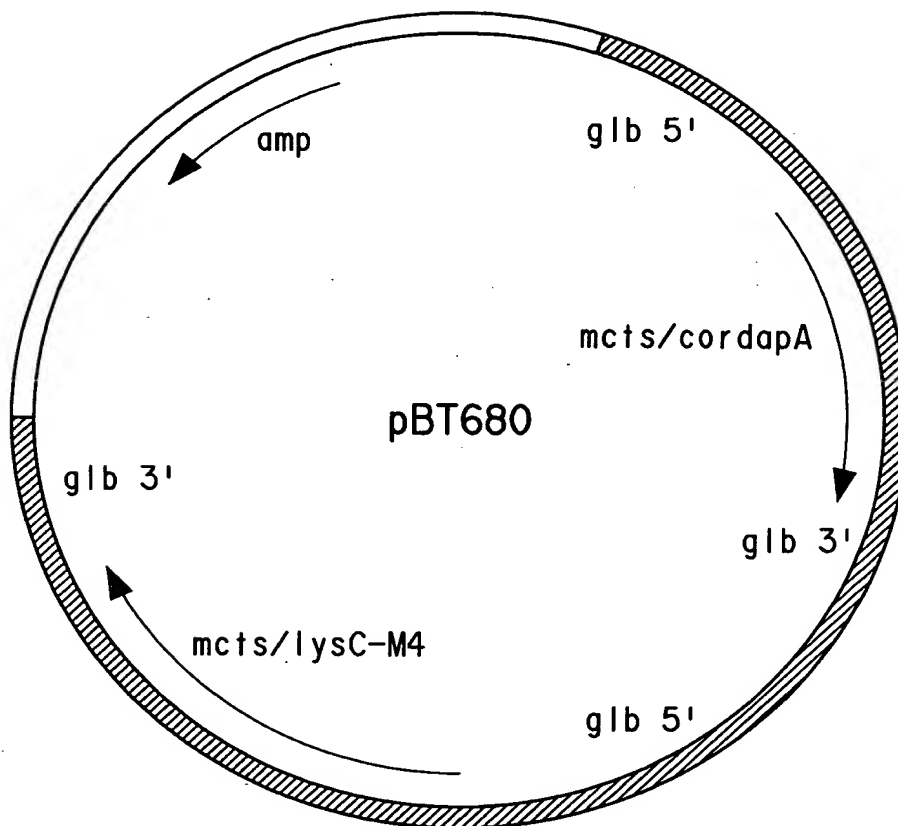


FIG.17

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

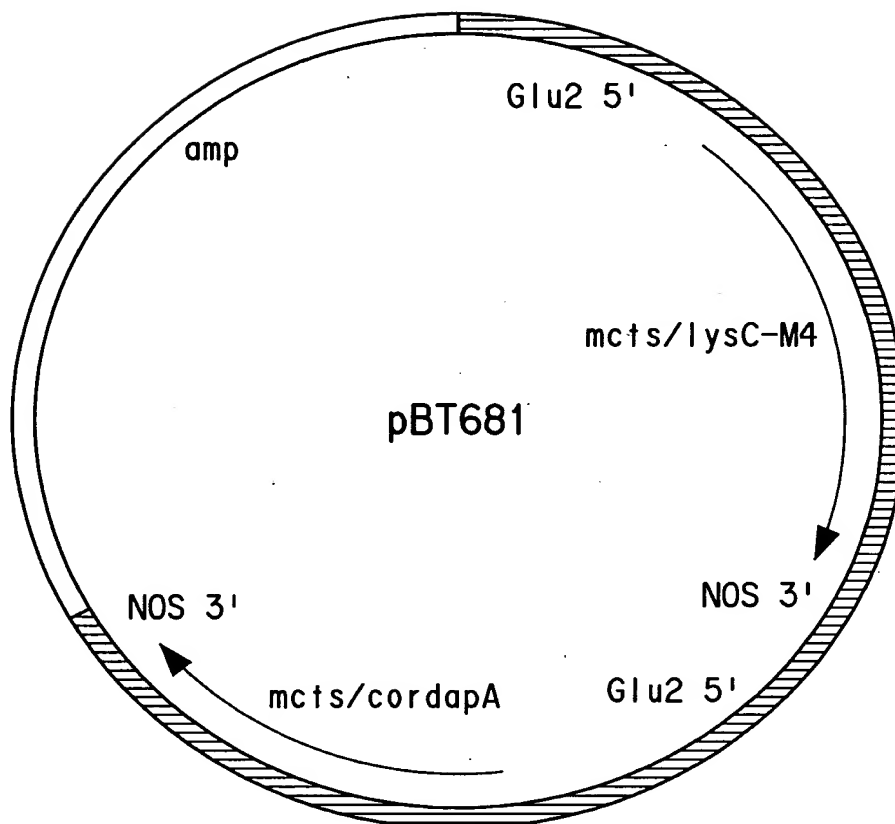


FIG.18

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

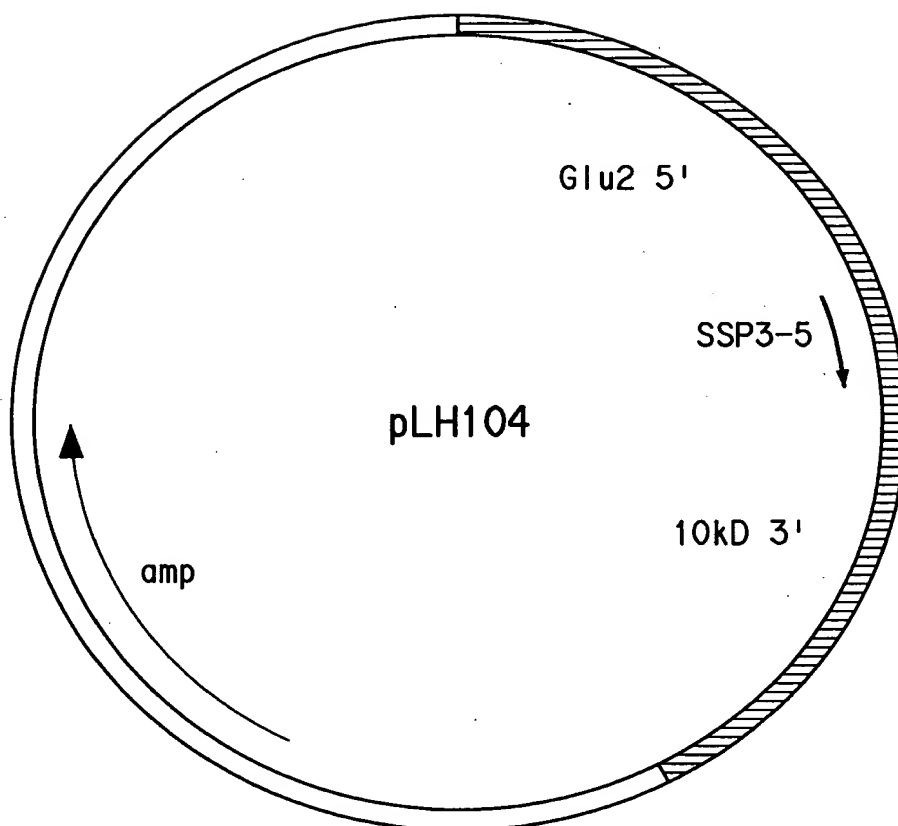


FIG.19

36222 40264000

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

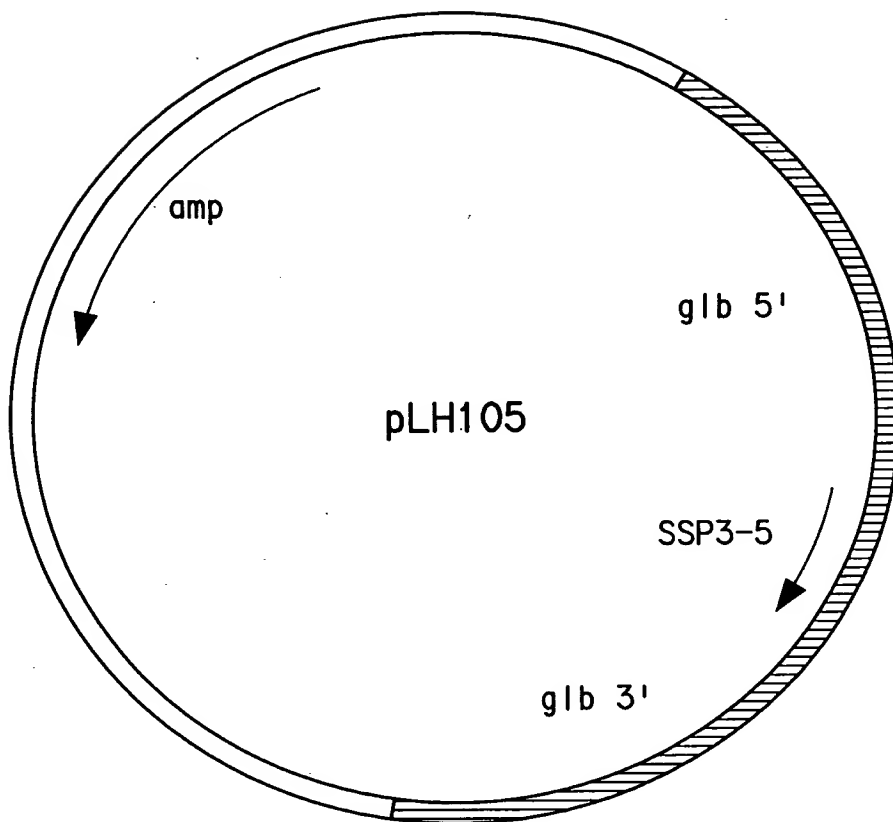


FIG.20

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

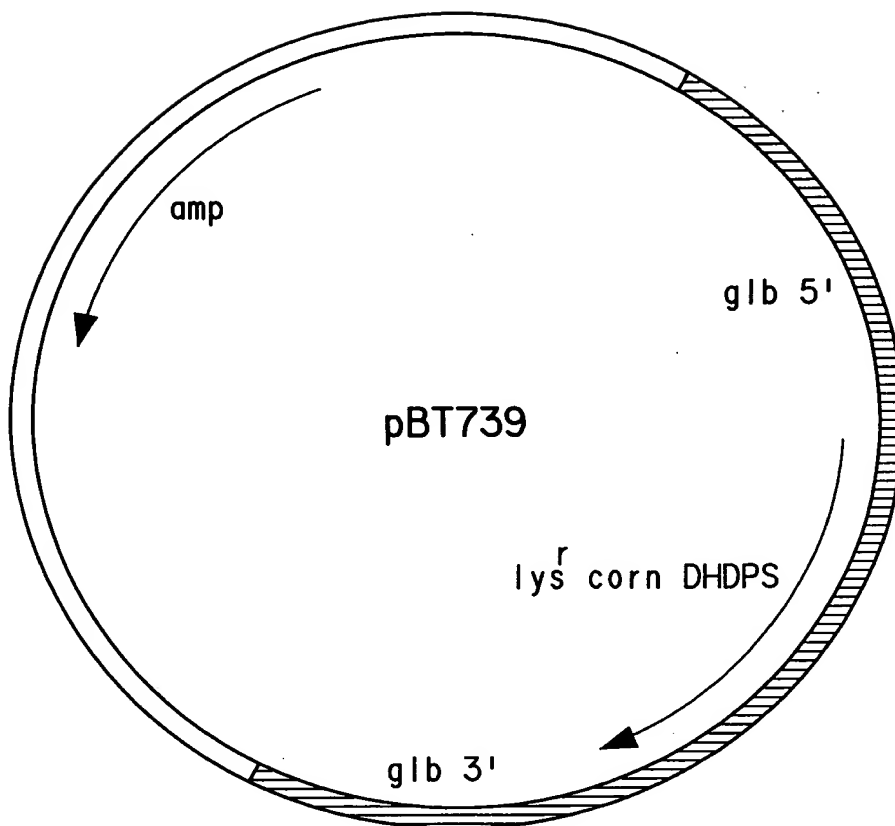


FIG.21

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

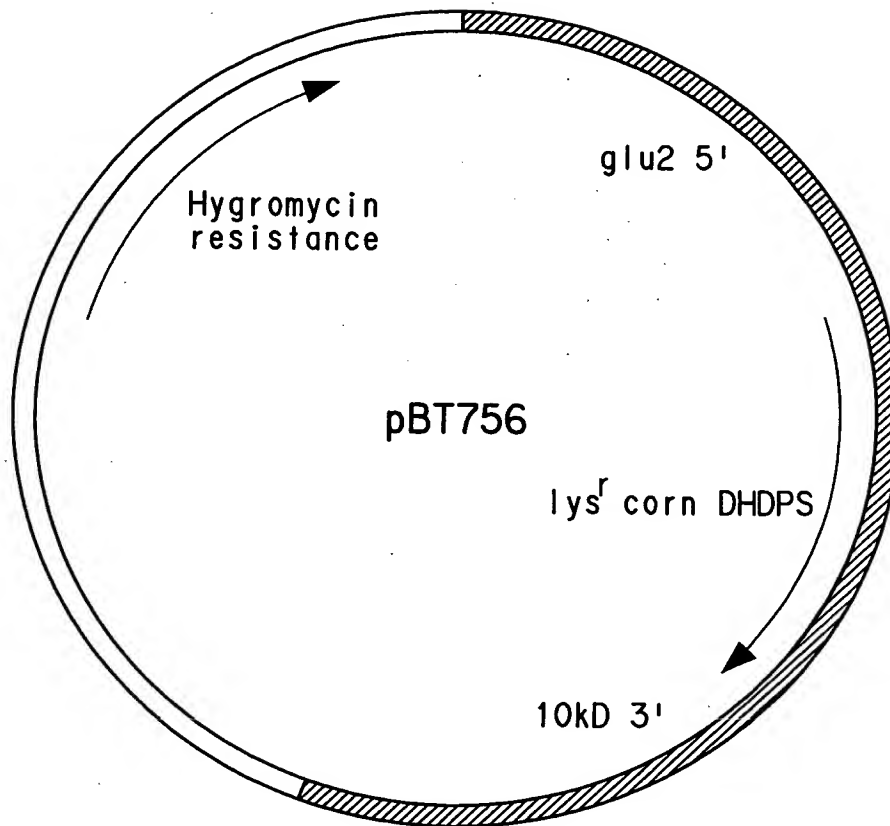


FIG.22